

2	<b>SITE ASPECTS</b>	<b>2.3 EMISSIONS FROM THE SITE</b>
		<b>SA 14 NOISE FROM BUILDING EQUIPMENT</b>
	<b>EXCLUSIONS</b>	None.
	<b>OBJECTIVE</b>	Encourage proactive design techniques intended to reduce the nuisance caused to neighbours by noise from building services equipment.
	<b>CREDITS ATTAINABLE</b>	1
	<b>PREREQUISITES</b>	Compliance with the Noise Control Ordinance and Subsidiary Regulations.
	<b>CREDIT REQUIREMENT</b>	1 credit for demonstrating the level of the intruding noise at the facade of the potential noise sensitive receivers is in compliance with the criteria recommended in the Hong Kong Planning Standards and Guidelines.
	<b>ASSESSMENT</b>	<p>On the basis of promoting good environmental design assessment shall assume that a noise sensitive development already exists or has the potential to exist and be affected by the building. Ideally, therefore, assessment should be made at the facade of the potential noise sensitive receivers.</p> <p>The noise assessments shall be conducted in accordance with the Technical Memorandum [1]. This lays down statutory Acceptable Noise Levels (ANL). However, in order to plan for a better environment, all fixed noise sources should be located and designed so that when assessed in accordance with the Technical Memorandum, the level of the intruding noise at the facade of the nearest sensitive receiver should be at least 5 dB(A) below the appropriate ANL shown in Table 3 of the Technical Memorandum or, in the case of the background being 5 dB(A) lower than the ANL, should not be higher than the background, in accordance with paragraph 4.2.13, Chapter 9 of the Hong Kong Planning Standards and Guidelines [2].</p> <p>The Client shall provide evidence in form of detailed analysis, appropriate calculations and/or measurements that the building complies with the assessment criteria.</p>
	<b>BACKGROUND</b>	<p>Noise emission from equipment on and around buildings contributes to noise pollution with potential impacts on neighbouring properties. Under the Noise Control Ordinance noise emanating from certain types of premises is controlled by means of Noise Abatement Notices which may be served on owners or occupiers of offending premises if the noise emitted:</p> <ul style="list-style-type: none"> <li>• does not comply with the ANLs as set out in a technical memorandum;</li> <li>• is a source of annoyance to any person other than persons on the premises; and</li> <li>• does not comply with any standard or limit contained in any current Regulations.</li> </ul>

1 Environmental Protection Department. Technical Memorandum for the Assessment of Noise from Places Other than Domestic Premises, Public Places or Construction Sites.  
[http://www.epd.gov.hk/epd/english/environmentinhk/noise/guide\\_ref/files/tm\\_nondomestic.pdf](http://www.epd.gov.hk/epd/english/environmentinhk/noise/guide_ref/files/tm_nondomestic.pdf)

2 Hong Kong Planning Standards and Guidelines, Chapter 9 Environment  
[http://www.pland.gov.hk/pland\\_en/tech\\_doc/hkpsg/full/ch9/ch9\\_text.htm](http://www.pland.gov.hk/pland_en/tech_doc/hkpsg/full/ch9/ch9_text.htm)

In practice the Authority will respond to complaints and compliance with the ANLs will be required only after a Noise Abatement Notice has been served. Non-compliance with such a notice will be an offence. The Technical Memorandum [1] contains the technical procedures that should be adopted by the Authority when investigating a complaint regarding noise emanating from such premises to determine whether or not a noise abatement notice should be issued.

BS 4142 [3] suggests methods for noise prediction and a generalised description of prediction is given in ISO 9613-2 [4]. Good practices on building services system noise control are published by the Environmental Protection Department [5,6].

- 3 British Standards Institution. Method for rating industrial noise affecting mixed residential and industrial areas. British Standard BS 4142:1997. London, BSI, 1997.
- 4 International Standards Organisation. ISO 9613-2. Attenuation of Sound During Propagation Outdoors Part 2. General Method of Calculation 1st Ed. 1996.
- 5 Environmental Protection Department. Good practices on pumping system noise control. 2005.  
[http://www.epd.gov.hk/epd/english/environmentinhk/noise/guide\\_ref/files/Pump\\_sys\\_E-06.pdf](http://www.epd.gov.hk/epd/english/environmentinhk/noise/guide_ref/files/Pump_sys_E-06.pdf)
- 6 Environmental Protection Department. Good practices on ventilation system noise control. 2006.  
[http://www.epd.gov.hk/epd/english/environmentinhk/noise/guide\\_ref/files/Vent\\_sys\\_E-06.pdf](http://www.epd.gov.hk/epd/english/environmentinhk/noise/guide_ref/files/Vent_sys_E-06.pdf)